

In re Patent Application of:
PERKINSON ET AL.
Serial No. 09/845,103
Filing Date: **APRIL 30, 2001**

In the Claims:

1. (Currently Amended) A method of selectively coupling digital communication packets, that are presented to virtual circuit input ports of a packet switch, through said switch to virtual circuit output ports thereof, said method comprising the steps of:

(a) providing a plurality of packet analyzers having respectively different configuration functions, a respective ~~one of which is packet analyzer being operative to analyze contents of a packet presented thereto and to provide an output representative of whether or not said contents of said packet~~ has a protocol that conforms with the configuration function of said respective packet analyzer ~~contains prescribed information;~~

(b) coupling a packet presented to a respective virtual input port of said switch to respective ones of said plurality of packet analyzers; and

(c) in response to a respective packet analyzer to which a packet is presented in step (b) supplying an output representative that ~~the contents of the packet coupled thereto in step (b)~~ has a protocol that conforms with the configuration function of said respective packet analyzer ~~contains said prescribed information~~, coupling said respective packet to a selected virtual circuit output port of said switch, but otherwise not coupling said respective packet to a virtual circuit output port of said switch.

2. (Currently Amended) The method according to claim 1, wherein step (b) comprises coupling a packet presented to a respective virtual input port of said switch to a prescribed order of said plurality of packet analyzers, and step (c) comprises, in response to any packet analyzer of said prescribed order of said plurality of packet analyzers

In re Patent Application of:
PERKINSON ET AL.
Serial No. 09/845,103
Filing Date: **APRIL 30, 2001**

supplying said output representative that ~~contents of the~~
packet coupled thereto has a protocol that conforms with the
configuration function of said any packet analyzer~~contains~~
~~said prescribed information~~, coupling said respective packet
to a selected virtual circuit output port of said switch, and
terminating coupling of said packet to any remaining ones of
said prescribed order of said plurality of packet analyzers.

3. (Currently Amended) The method according to claim 1,
wherein step (c) comprises, in response to no packet analyzer
having a configuration function that conforms with the
protocol of a packet coupled in step (b)~~for which there is an~~
~~associated virtual circuit port of said switch~~, accepting the
packet coupled thereto and discarding said packet.

4. (Currently Amended) The method according to claim 1,
wherein

step (a) comprises providing a prescribed order of first
through N-lth packet analyzers having configuration functions
for which there are associated virtual circuit ports of said
switch, and an Nth packet analyzer having no configuration
~~functions~~function for which there is an associated virtual
circuit port of said switch,

step (b) comprises coupling said packet presented to a
respective virtual input port of said switch to respective
ones of said first through N-lth packet analyzers, and

step (c) comprises, in response to any of said first
through N-lth packet analyzers supplying an output
representative that the ~~contents~~ protocol of the packet
coupled thereto in step (b) conforms with the configuration
function of said any packet analyzer~~contains said prescribed~~
~~information~~, coupling said respective packet to a selected
virtual circuit output port of said switch, but in response to

In re Patent Application of:
PERKINSON ET AL.
Serial No. 09/845,103
Filing Date: **APRIL 30, 2001**

none of said first through N-1th packet analyzers supplying an output representative that the ~~contents~~protocol of the packet coupled thereto in step (b) conforms with the configuration function of said any packet analyzer~~contains said prescribed information~~, causing said Nth packet analyzer to accept and discard said packet.

5. (Currently Amended) A packet switch control mechanism for controlling the selective coupling of digital communication packets presented to virtual circuit input ports of a packet switch to virtual circuit output ports thereof comprising:

a plurality of packet analyzers, a respective one of which is operative to analyze contents of a packet presented thereto and to provide an output representative of whether or not ~~said contents of said packet~~ has a protocol that conforms with the configuration function of said respective packet analyzer~~contains prescribed information~~; and

a packet distribution controller coupled to said plurality of packet analyzers and being operative, in response to a respective packet analyzer supplying an output representative that ~~the contents of the packet coupled thereto~~ has a protocol that conforms with the configuration function of said respective packet analyzer~~contains said prescribed information~~, to couple said respective packet to a selected virtual circuit output port of said switch, but otherwise not coupling said respective packet to a virtual circuit output port of said switch.

6. (Currently Amended) The packet switch control mechanism according to claim 5, wherein said packet distribution controller is operative, in response to any packet analyzer of a prescribed order of said plurality of

In re Patent Application of:
PERKINSON ET AL.
Serial No. **09/845,103**
Filing Date: **APRIL 30, 2001**

packet analyzers supplying said output representative that ~~contents of the packet coupled has a protocol that conforms with the configuration function of said any packet analyzer thereto contains said prescribed information~~, to cause said respective packet to be coupled to a selected virtual circuit output port of said switch, and to terminate further coupling of said packet to any remaining ones of said prescribed order of said plurality of packet analyzers.

7. (Currently Amended) The packet switch control mechanism according to claim 5, wherein said packet distribution controller is operative, in response to no packet analyzer having a configuration function that conforms with the protocol of the packet coupled thereto ~~for which there is an associated virtual circuit port of said switch~~, to ~~cause~~ cause said packet to be accepted and discarded ~~discarding~~.

8. (Currently Amended) The packet switch control mechanism according to claim 5, wherein said plurality of packet analyzers comprises a prescribed order of first through N-1th packet analyzers having configuration functions for there are associated virtual circuit ports of said switch, and an Nth packet analyzer having no configuration ~~function~~ functions ~~for which there is an associated virtual circuit port of said switch~~, and wherein said packet distribution controller is operative, in response to any of said first through N-1th packet analyzers supplying an output representative that ~~the contents of the packet coupled thereto has a protocol that conforms with the configuration function of any packet analyzer~~ contains said prescribed information, to couple said respective packet to a selected virtual circuit output port of said switch, and wherein said Nth packet

In re Patent Application of:
PERKINSON ET AL.
Serial No. **09/845,103**
Filing Date: **APRIL 30, 2001**

analyzer is operative, in response to having said packet
coupled thereto, to accept and discard said packet.